

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the matter of)	
)	
Recommendations Approved by the Advisory)	
Committee for the 2012 World)	IB Docket No. 04-286
Radiocommunication Conference)	

**COMMENTS OF
AT&T, ALCATEL-LUCENT, ERICSSON INC., MOTOROLA MOBILITY INC., NOKIA
INC., QUALCOMM INCORPORATED, SAMSUNG INFORMATION SYSTEMS
AMERICA, INC., T-MOBILE USA, INC., TELECOMMUNICATIONS MANAGEMENT
GROUP, AND VERIZON WIRELESS**

AT&T, Alcatel-Lucent, Ericsson Inc., Motorola Mobility Inc., Nokia Inc., QUALCOMM Incorporated, Samsung Information Systems America, Inc., T-Mobile USA, Inc., Telecommunications Management Group (TMG), and Verizon Wireless submit the following comments in response to the March 10, 2011 *Public Notice* (DA 11-447) issued by the Federal Communication Commission (Commission). In the *Public Notice*, the Commission seeks comment on the recommendations approved by the Advisory Committee for the 2012 World Radiocommunication Conference (WRC-12 Advisory Committee or WAC) relating to WAC documents 128 and 129. As described herein, the undersigned companies urge the Commission to adopt Proposal A of WAC document 129.

I. DISCUSSION

We applaud the Commission for its recognition that broadband contributes to the economy, social empowerment, technological growth and innovation. FCC Chairman Julius Genachowski is unequivocal in expressing how critical wireless technologies are to achieving the

objectives outlined in the National Broadband Plan (NBP). Mobility is so vital to our future that even the U.S. President's 2011 State of the Union address calls for businesses to deploy next generation high speed wireless coverage to 98 percent of Americans. While there are multiple factors to bringing about these promises, it is without question that access to spectrum must be addressed. And if businesses are going to invest in and achieve the economies of scale that would maximize competitiveness, there should be complementary work done at the international level to ensure that these efforts are put to best use.

We urge the Commission to adopt the position found in Proposal A of WAC document 129 (8 March 2011). Proposal A recommends an agenda item for the 2015 World Radiocommunications Conference that would study and consider the need for the allocation and identification of additional radio spectrum between 400 MHz to 6000 MHz to support mobile broadband, including IMT. The proposal does not presuppose or offer any conclusion on the need or amount of spectrum to support mobile broadband at this time and will simply enable the relevant study groups to consider this important matter during the International Telecommunication Union Radiocommunication Sector (ITU-R) study period.

Proposal A is far superior to Proposal B in document 129 for several reasons. Proposal A has the advantage of being consistent with the objective of the NBP to identify 500 MHz of spectrum for broadband. Furthermore, Proposal A would allow a range of mobile broadband technologies (including IMT-2000 and IMT-Advanced) to be deployed in any spectrum identified, enabling operator and consumer choice.

In contrast, Proposal B places unwarranted restrictions on the bands to be studied and is not consistent with the NBP. Proposal B excludes from study even certain bands identified in the NBP for consideration for wireless broadband use. Compared to Proposal A, Proposal B

excludes from study over 2,300 MHz of spectrum that is already allocated to the mobile service on a primary basis. Proposal B also excludes from further study 500 MHz of spectrum which the ITU has already identified for IMT (300 MHz in the frequency range 1710-2000 MHz, and 200 MHz between 3400-3600 MHz). Proposal A calls for studies that allow the latest technological advances for mobile broadband/IMT systems to be taken into account, while Proposal B seems to (wrongly) imply necessary studies have already been done and precludes the opportunity to improve on any prior studies. Furthermore, Proposal A calls on WRC-15 to consider regulatory actions, including additional allocations to the mobile service, to support mobile broadband applications; Proposal B does not.

We provide additional, more detailed, comments below related to Proposal B as we find this proposal inconsistent with current U.S. policy and prior decisions of the ITU, and find numerous other shortcomings in that Proposal.

II. ADDITIONAL COMMENTS

1. Proposal B recommends consideration for both mobile and fixed spectrum yet the priority by many governments is to consider spectrum to support mobile broadband applications. The NPB includes specific acknowledgement of *mobile* broadband as a major emphasis.
2. Proposal B sets 3400 MHz as the upper limit of study compared to the Proposal A limit of 6000 MHz.
 - a. Between the 3400 MHz to 6000 MHz frequency range there is 1,250 MHz of spectrum for which there is BOTH a primary Fixed Satellite Service (FSS) and a primary MOBILE allocation, either on a global basis or in both ITU-R Regions 2 and 3.

- b. Also, in the 3400-6000 MHz frequency range there is an additional 655 MHz of spectrum that is allocated to the MOBILE service on a primary basis globally or in ITU-R Regions 2 and 3 along with other primary services, but not FSS.
 - c. Proposal B would have the 73% of the spectrum that is allocated on a primary basis to the MOBILE service go unstudied between 3400 and 6000 MHz.
- 3. Proposal A includes studying the 960-2000 MHz frequency range whereas Proposal B excludes this range.
 - a. Within the frequency range 960-2000 MHz, there is 445 MHz of spectrum allocated to the MOBILE service on a primary basis. Of that spectrum, 300 MHz is already identified for IMT.
 - b. Of the spectrum in the 960-2000 MHz frequency range, there are no allocations to the MOBILE service in bands that are allocated to the Radionavigation Satellite Service (RNSS) or the Aeronautical Radionavigation Service on a primary basis.
- 4. Proposal B peremptorily excludes the study of RNSS bands and all other bands between 960 MHz and 2000 MHz. Such exclusions are unwarranted. Most of the IMT systems and cellular systems currently deployed worldwide rely on GPS for geolocation capability and for timing signals necessary for system synchronization. As such, the IMT/mobile broadband community has a strong interest in protecting the RNSS.
- 5. Proposal B states that previous studies have highlighted incompatibilities between IMT systems and systems of other services (e.g., Fixed Satellite Service), and concludes there is no need for further studies thereby ignoring any technological advances for mobile broadband/IMT or the other services that could help to limit the adverse impact of potential co-channel and adjacent band incompatibilities.

- a. Proposal B has also ignored the fact that, in the NTIA version of the proposed agenda item for WRC-15, NTIA set an upper frequency limit of 4400 MHz.
6. Proposal B uses the term “BWA, including IMT”. However, the ITU Recommendation detailing BWA does not include the most advanced technological developments of IMT, that is the IMT-Advanced. IMT-Advanced is one of the highest performing and most spectrally efficient mobile broadband technologies of the age and as such should not be arbitrarily excluded as a tool for maximizing the effective use of spectrum allocations.
 - a. Proposal B also ignores the fact that IMT is a defined and accepted term already used in the Radio Regulations for allocations to the mobile service, while BWA has no such definition, usage or designation in the Radio Regulations.
7. Proposal A calls on WRC-15 to consider necessary changes to the Radio Regulations, including additional allocations to the mobile service, to accommodate the development of mobile broadband including IMT; Proposal B does not.
 - a. Instead, Proposal B proposes that “... the results of studies on the spectrum requirements and, if required, to identify potential frequency bands in the 400 MHz to 960 MHz, 2000 MHz to 2483 MHz and 2500 MHz to 3400 MHz bands that may be suitable for the further development of BWA systems, including IMT applications”, be reported to WRC-15.

III. CONCLUSION

In summary, the undersigned companies urge the Commission to adopt the position found in Proposal A of WAC document 129 (8 March 2011), which will best support mobile broadband applications, as opposed to Proposal B which is inconsistent with the current policy adopted by the United States, as well as with prior decisions of the ITU. As such, we encourage

the Commission to recognize the various shortcomings contained within Proposal B when considering the recommendations of the WRC-12 Advisory Committee. Thank you for the opportunity to offer our recommendation.

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Respectfully submitted,

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